

Notice of Allowability

Application No.

10/665,012

Applicant(s)

SILLARD ET AL.

Examiner

Akm Enayet Ullah

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to June 18, 2004.

2. ☒ The allowed claim(s) is/are 1-36.

3. ☐ The drawings filed on _____ are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 6/18/04

4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.


Akm Enayet Ullah
Primary Examiner
Art Unit: 2874

Reasons For Allowance

None of the references disclose alone or in combination a chromatic dispersion compensation module comprising:

the module having insertion losses IL expressed in dB,

$$\text{where } IL = \frac{D_{DCM}}{D_{DCF}} \cdot \alpha_{DCF} + \Gamma_{in} + \Gamma_{out}$$

and where $D_{DCM} = -1360$ ps/nm,

the module having a non-linearity criterion NLC representing the effects of the non-linear phase and expressed in 10^{-6} km/W-dB,

$$\text{where } NLC = \frac{100 \cdot n_2 \cdot (1 - 10^{\frac{D_{DCM}}{10 \cdot FOM_{DCF}}})}{A_{eff} \cdot \alpha_{DCF} \cdot 10^{10}}$$

the module having a quality criterion CQ expressed in dB,

where $CQ = IL + 10 \log NLC$,

the module having a quality-to-price ratio criterion CQ2 expressed in dB,

where $CQ2 = CQ + B \log(FOM_{DCF})$

and where $B = 18$,

and the compensation optical fiber or the set of compensation optical fibers in series having,

firstly, average chromatic dispersion more negative than -130 ps/nm-km,

secondly, average chromatic dispersion to dispersion slope ratio in the range 240 nm to 400 nm, and

thirdly, for a given average figure of merit, average attenuation sufficiently high for the quality criterion to be less than 20.5 dB and the quality-to-price ratio criterion to be less than 61.3 dB.


AKM ENAYET ULLAH
PRIMARY EXAMINER